



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

U.S. Patent

Application of: T. Mori

Serial Number : 10/825,773

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For : PRINTING PROCESS

Group Art Unit: 2854

Examiner : Anthony Nguyen

DECLARATION UNDER 37 C.F.R. 1.132

Hon. Commissioner of Patents

and Trademarks

Washington, D.C. 20231

Sir:

I, TAKAHIRO MORI, hereby declare and say as follows:

That I am a graduate from Tohoku University having been awarded a Bachelors Degree in Engineering in March 1984.

That since April 1984, I have been employed by Konica Corporation (present Konica Minolta MG Co., Ltd.), the owner of the above-identified application. During my employment, I have been engaged in the research and the study of planographic printing plate materials in the Research and Development Laboratory of my company.

That I am a sole inventor of the present application.

That I am familiar with the subject matter of the present invention.

What follows is an accurate summary of experiments conducted according to my detailed instructions and under my personal supervision, and the results obtained therefrom.

#### Comparative test and test results

1. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Pfeiffer et al. (US 5,447,102) in view of Kossak (US 3,735,702). The Examiner states on page 3, lines 3 to 10 of the outstanding Office Action, "With respect to claims 1 and 6, Pfeiffer et al. teaches a printing process for a printing press having a plate cylinder 11, a blanket cylinder 16, a dampening roller 19 and an inking roller 13, the process comprising the steps of mounting the printing plate material (D) on the plate cylinder, carrying out printing by supplying dampening water and printing ink to the plate (Pfeiffer et al., Fig. 1A, 2 and col. 9, lines 32-44), washing the surface of the blanket cylinder (Pfeiffer et al., col. 10, lines 18-20), dismantling the printing plate and mounting the second printing plate, i.e., replacing the printing plate (Pfeiffer et al., col. 11, lines 13-16) and carrying out printing with the new plate (Pfeiffer et al., col. 11, lines 34-59)."

Pfeiffer et al. discloses the steps of mounting a printing plate (D) on the plate cylinder (see Fig. 1A, and col. 5, line 62 of Pfeiffer et al.), but not the steps of mounting the printing plate material as recited in claim 1 on the plate cylinder. The printing plate material is a printing plate precursor for preparing a printing plate, and is different from the printing plate (D) disclosed in Pfeiffer et al. The printing process of the invention provides improved developability on a press when the

printing plate material as recited in claim 1, which is a printing plate precursor, is mounted on the plate cylinder of a printing press and development is carried out with a dampening water and printing ink on the plate cylinder.

2. In order to demonstrate the unexpected results of the invention, comparative test was carried out. In the comparative test, printing plate material sample 2-1 (first sample) and printing plate material sample 2-2 (second sample) prepared in EXAMPLES of the present Specification were employed as printing plate materials, since Pfeiffer et al. does not disclose the printing plate material as recited in claim 1.

#### Process 1

The printing plate material samples 2-1 and 2-2 were processed in the same manner as in Example 1 of the present Specification. Herein, drying step (1) was carried out (see page 68, lines 18-22 of the Specification).

#### Process 2

The printing plate material samples 2-1 and 2-2 processed in the same manner as in Comparative Example 1 of the present Specification. Herein, no drying was carried out (drying step (0), see page 68, lines 17 of the Specification).

#### Process 3

The printing plate material samples 2-1 and 2-2 were exposed in the same manner as in EXAMPLES of the present Specification, and, before being mounted on the plate cylinder of a printing press, were developed with a 1:1 by volume mixture of the dampening water and the printing ink employed in EXAMPLES of the present Specification to obtain printing plate samples 2-1 and 2-2. After that, the printing plate samples 2-1 and 2-2 (printing plates corresponding to

printing plate D of Pfeiffer et al.) were mounted in order on the plate cylinder of the printing press, and processed in the same manner as in Example 1 of the present Specification, in which the same method as the printing plate material mounting method (1) was employed for mounting the printing plate samples, and drying step (1) was employed for drying the blanket cylinder.

#### Process 4

The printing plate material samples 2-1 and 2-2 were exposed in the same manner as in EXAMPLES of the present Specification, and, before being mounted on the plate cylinder of the printing press, were developed with a 1:1 by volume mixture of the dampening water and the printing ink employed in EXAMPLES of the present Specification to obtain printing plate samples 2-1 and 2-2. After that, the printing plate samples 2-1 and 2-2 were mounted in order on the plate cylinder of the printing press, and processed in the same manner as in Comparative Example 1 of the present Specification, in which the same method as the printing plate material mounting method (1) was employed for mounting the printing plate samples, but no drying was carried out for the blanket cylinder (drying step (0), see page 68, lines 17 of the Specification).

With respect to the printing plate material samples 1-2 and 2-2, and printing plate samples 2-1 and 2-2, developability on a press (hereinafter also referred to as initial printability) was evaluated in each of the processes 1 through 4 above in the same manner as in EXAMPLES of the Specification.

The results are shown in Table 7.

Table 7

Process	Printing plate material samples	Drying step	Printing plate (material) mounting method	Initial print-ability (Number)
1 (Inventive)	2-1, 2-2	(1)	(1)	10
2 (Comparative)	2-1, 2-2	(0)	(1)	60
3	2-1, 2-2	(1)	(1)	7
4	2-1, 2-2	(0)	(1)	8

As is apparent from Table 7, in the printing process in which the printing plate material as recited in claim 1 (printing plate precursor) is mounted on the plate cylinder of a printing press, and development is carried out on the plate cylinder to prepare a printing plate, the inventive printing process comprising drying step (1) provides greatly improved initial printability, compared with the comparative printing process comprising drying step (0), while, in the printing process in which a printing plate (printing plate D corresponding to Pfeiffer et al.) is mounted on the plate cylinder of a printing press, the printing process comprising drying step (1) provides approximately the same result as the printing process comprising drying step (0). In the printing process of Pfeiffer et al, there is no substantial difference in initial printability between a printing process comprising drying step (1) and a printing process comprising drying step (0). The results are unexpected to one of ordinary skill in the art, and it would not have been obvious to one of ordinary skill in the art to attain the invention over Pfeiffer et al., which fail to disclose the printing process as claimed, in view of Kossak. Therefore, we believe that claim 1, and all the claims, which depend therefrom, will be in a situation of allowance.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001, of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: March 11, 2005

Takahiro Mori

TAKAHIRO MORI